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APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/880,388	06/13/2001		Yoshikazu Shingu	SHC0131	5198
	7590	10/09/2003		EXAMINER	
Michaal S Gzybowsk				ANDERSON, CATHARINE L	
Butzel Long 350 South Main Street				ART UNIT	PAPER NUMBER
Suite 300				3761	
Ann Arbor,	MI 4810	4 .		DATE MAILED: 10/09/2003	3
					4 -

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Please find below and/or attached an Office communication concerning this application or proceeding.

		T A	<u> </u>
	Application No.	Applicant(s)	
Office Action Summany	09/880,388	SHINGU ET AL.	
Office Action Summary	Examiner	Art Unit	
	C. Lynne Anderson	3761	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	36(a). In no event, however, may a reply be tin within the statutory minimum of thirty (30) day rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication D (35 U.S.C. § 133).	
1) Responsive to communication(s) filed on <u>05 A</u>	August 2003 .		
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ Thi	is action is non-final.		
3) Since this application is in condition for allowa closed in accordance with the practice under			S
Disposition of Claims			
4) $\boxtimes$ Claim(s) <u>1-6</u> is/are pending in the application.		•	
4a) Of the above claim(s) is/are withdrav	vn from consideration.	•	•
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1-6</u> is/are rejected.			
7) Claim(s) is/are objected to.		9)0	
8) Claim(s) are subject to restriction and/or Application Papers	r election requirement.		
9)☐ The specification is objected to by the Examine		•	
10) ☐ The drawing(s) filed on is/are: a) ☐ accept	oted or b)⊡ objected to by the Exa	miner.	
Applicant may not request that any objection to the	•		
11)☐ The proposed drawing correction filed on	, and the second	oved by the Examiner.	
If approved, corrected drawings are required in rep			
12) ☐ The oath or declaration is objected to by the Ex-	aminer.		
Priority under 35 U.S.C. §§ 119 and 120			
13) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a	a)-(d) or (t).	•
a)⊠ All b)□ Some * c)□ None of:			
1.⊠ Certified copies of the priority documents	•		
2. Certified copies of the priority documents			
<ul><li>3. Copies of the certified copies of the prior</li><li>application from the International Bu</li><li>* See the attached detailed Office action for a list</li></ul>	reau (PCT Rule 17.2(a)).		
14) Acknowledgment is made of a claim for domesti	c priority under 35 U.S.C. § 119(	e) (to a provisional applicati	on).
<ul> <li>a)  The translation of the foreign language pro</li> <li>15)  Acknowledgment is made of a claim for domesting</li> </ul>			
Attachment(s)			
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)	
S. Patent and Trademark Office			

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#### **DETAILED ACTION**

#### Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05 August 2003 has been entered.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kline et al. (5,957,908).

With respect to claims 1, 3, 4, and 6, Kline discloses a disposable diaper 20, as shown in figure 1, comprising a topsheet 24, a backsheet 26, a liquid absorbent core 28, a front waist region 46, a rear waist region 44, a crotch region 48, and wings 62 and 64 formed on the rear portion and extending outward. Fastener sections 30 are formed on the wings 62 and 64 and extend outward, the fastener sections 30 having male fasteners formed on and extending from their inner surfaces, as shown in figure 7. The wings 62 and 64 comprise a nonwoven fabric made of thermoplastic synthetic fibers, as

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disclosed in column 15, lines 29-67. A plurality of fine fusion spots 250 are formed on the inner surfaces of the wings and arranged such that there is a greater number of fine fusion spots 250 per unit area in the outer side regions 253 of the wings 62 and 64 than in the inner regions 254. The area comprising the greater number of fine fusion spots 250 comprises the area extending from the outer edge of the male mechanical fastener strips 30 inward over a transverse distance that is greater than the width of the male mechanical fastener strips 30, as shown in figure 7. Kline discloses the wings 62 and 64 being made of a laminate of two layers, where the layers are bonded at spots 250 using methods such as heat, pressure, or ultrasound (column 16, lines 28-30). It is the examiner's position that it is impossible to laminate two sheets together using a heating method, pressure method, or ultrasonic method from a non-exposed surface, or from the inside. It is therefore inherent in the method of fusing that when laminating two pieces of material using heat, pressure, or ultrasonic means, the fusion spots must be formed on the outside surface of at least one of the layers.

Kline does not, however, expressly disclose that the fine fusion spots are located on the inner exposed surfaces of the wings. At the time the invention was made, it would have been an obvious matter of design choice to one of ordinary skill in the art to have the fine fusion spots on the inner exposed surfaces of the wings because the applicant has not disclosed that having the fine fusion spots on the inner exposed surfaces of the wings solves any stated problem or serves any particular purpose. One of ordinary skill in the art would furthermore have expected Applicant's invention to perform equally well with either the fine fusion spots disposed on the outer surface or

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the claimed inner surface, as the fine fusion spots of both Kline and the instant invention serve the same purpose and perform the same function of providing increased strength and stiffness in areas of the bonds. It would therefore have been and obvious matter of design choice to modify Kline to obtain the invention as specified in claim 1.

With respect to claim 2, the outer regions 253 of the wings 62 and 64 have a higher density of fine fusion spots 250, as shown in figure 7, and therefore are stiffer than the inner regions 254.

With respect to claim 5, the outer side region of the wings 62 and 64 may be defined as having a width equal to the width of the male mechanical fastener strips 30.

### Response to Arguments

Applicant's arguments filed 05 August 2003 have been fully considered but they are not persuasive. Kline discloses an outer region 253 of the wings 62 and 64 having a greater density of fine fusion spots 250, as shown in figure 7, which extends from the outer edge of the male mechanical fastener strip 30 inward. The outer region 253 extends inward from the male mechanical fastener strip 30 over a transverse distance that is greater than or equal to the width of the male mechanical fastener strip 30, as shown in figure 7.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Lynne Anderson whose telephone number is (703) 306-5716. The examiner can normally be reached on Monday through Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (703) 308-1957. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

cla

October 8, 2003

WEILUN LO SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3700